## **BLACK KNOT**

## **CAUSE**

Black knot is caused by the fungus Apiosporina morbosa which lives in knots on previously infected twigs and branches. Spores are released during wet periods in the spring. The wind carries these spores to trees where they infect young green shoots or wounded branches. While infection takes place in spring, knot development is not evident until autumn.



Joseph OBrien, USDA Forest Service, Bugwood.org

In the City of West Fargo,
homeowners are responsible for
maintenance on boulevard trees.
This includes any disease
management that may put
nearby trees at risk.



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## **SYMPTOMS**

Black knot is named for the dark, knotty growths, called galls, which form on infected branches. The first symptoms appear as small, light brown swellings. By the next season, the swellings turn olive-green in color with a velvety texture. The knots then darken and appear to have hard, brittle texture. Knots continue to expand each year until girdled branches eventually die. Black knot galls are most noticeable during fall and winter after all leaves have fallen.

## DISEASE MANAGEMENT

Pruning is the primary means for reducing or eliminating black knot.

Pruning is best accomplished in late winter (February or March.) This makes it easier to locate branches with galls. Cuts should be made at the point of the branch union, at least 6 to 8 inches below the knots. Infected branches should be removed from the area and burned, buried or disposed of. Infected branches left below the tree will continue to release spores that can start new infections. To maintain a disease-free tree, it will be necessary to inspect the tree and prune out any new galls each winter.

If black knot is a persistent problem, fungicide sprays are recommended in spring to protect young, expanding twigs.



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